

Ames Laboratory Environmental Management System (EMS) Awareness Training

What is EMS? An EMS is a continual cycle of planning, implementing, reviewing and improving the process and actions that the Laboratory undertakes to meet its organizational and environmental goals. The EMS is a way to formally document the Laboratory's environmental plans and procedures.

ISM + EMS = ISMS The principles for EMS have been incorporated into the Laboratory's Integrated Safety Management System.

Why EMS? EMS's are required to be implemented at Federal Facilities by December 31, 2005.

EMS Principles The Ames Laboratory chose the ISO14001:1996 Standard for modeling its Environmental Management System because it is the most widely used and accepted standard.

EMS Goals The EMS allows the Laboratory to set and monitor its own environmental goals (i.e. reduce waste, save energy, pollution prevention).

EMS Steering Group This group consists of members from the scientific research community and personnel from ESH&A, Purchasing, Materials Handling and Facility Services. The group is tasked with listing, ranking and setting objectives and targets for the Laboratory's significant environmental aspects.

Environmental Aspects are elements of the Laboratory's activities, products or services that can interact with the environment. The significance of each aspect (i.e. waste generation, printing) is somewhat subjective. That is why a ranking system is utilized by the EMS Steering Group to determine significant environmental impacts and for determining Laboratory objectives, targets and goals.

Self Declaration The Laboratory has "self-certified" that its EMS meets the requirements of ISO 14001:1996 standard.

Employee's Responsibility

- 1) Read and comply with the **Laboratory's Policy Statement** (see reverse side).
- 2) Complete all required institutional training.
- 3) Conserve natural resources.
- 4) Purchase products containing recycled materials and energy efficient products.
- 5) Look at the environmental impacts of your activities and minimize them as much as possible.

Pollution Prevention The Laboratory follows the EPA hierarchy of pollution prevention (**P2**) (waste minimization and affirmative procurement). First, **reduce** the volume of waste that is generated by a process. This can be accomplished by reducing inputs and/or the toxicity of inputs. Second, **reuse** any outputs as source material for the process. Third, **recycle** those materials, which you are unable to reuse. Recycling involves using by-products of a process to create a new usable product.

Affirmative Procurement - DOE funded facilities are required to buy products made of recycled materials to fulfill affirmative procurement contract requirements.

For further guidance please refer to the Laboratory's "Waste Minimization/pollution Prevention Plan" at the following address:
http://www.external.ameslab.gov/esha/ESH&A_Documents/planlist.html

A power point training presentation for Environmental Management System Awareness Training is also available at <http://www.external.ameslab.gov/esha/Training/ssstraining.html>

Contact the Ames Laboratory Environmental Specialist @ 4-7923 for additional information and assistance.

Ames Laboratory Integrated Safety Management System

Policy Statement

(Policy 10200.010, Revision 0)

Ames Laboratory has a strong commitment to the safety and health of each Laboratory employee. The Laboratory is equally committed to preventing accidental loss of resources and assets and protecting the general public and the environment, through pollution prevention, property loss or damage to the environment. Therefore, it is our goal to eliminate foreseeable hazards and maintain a safe and healthful workplace through continual improvement. In addition, complying with applicable Laboratory Work Smart Standards, Department of Energy Orders and regulatory standards is a prerequisite for doing Laboratory business and the responsibility of each employee.

In order to accomplish these goals, the Laboratory has incorporated the principles of Integrated Safety Management (ISM) and the practices of an Environmental Management System (EMS) into an Integrated Safety Management System (ISMS). Our Integrated Safety Management System provides mechanisms to ensure that we incorporate safety and environmental management into all aspects of our work, from planning to completion.

Each employee must participate through compliance with the Laboratory's ES&H requirements. Each level of line management has the responsibility to consider the impacts of their activities on the environment and workplace, and to support the performance and continuous improvement of effective safety and environmental practices, such as pollution prevention. This "team" effort is necessary to achieve a safe and productive research laboratory.

**Dr. Tom J. Barton, Director
Ames Laboratory**